

## ABSTRACT:

The CATV system according to the invention comprises at least one primary station (2) and a plurality of secondary stations (4). The primary station (2) and the secondary stations (4) are interconnected via a hierarchical CATV network (6) comprising a plurality of nodes (8, 10, 12, 14). At least part of these nodes (8, 10, 12, 14) are redirection nodes (30) comprising redirection means (32) for redirecting data signals. The redirection means (32) may comprise a router and/or a switch. The CATV network (6) comprises, in addition to prior art CATV networks, horizontal interconnections (20) between redirection nodes (30) which are part of a same hierarchical level and/or diagonal interconnections (22) between redirection nodes (30) which are part of different hierarchical levels and different branches. These additional interconnections (20, 22) can be used for load balancing and for self-healing of the CATV network (6).

Fig. 1